

VAPCO
SAFETY DATA SHEET
ETHYLENE GLYCOL

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Issued: 10/18/17
Revision No. 3

SECTION I - IDENTIFICATION

PRODUCT NAME: Ethylene Glycol
PRODUCT CODE: EG-5, EG-55
PRODUCT USE: Heat transfer fluid
COMPANY NAME: Vapco Products, Inc.
COMPANY ADDRESS: 401 Marshall Road, Valley Park, MO 63088
COMPANY PHONE: 636.923.2121
EMERGENCY PHONE: 800.255.3924

SECTION II - HAZARDS IDENTIFICATION

CLASSIFICATION: Acute toxicity, Oral (Category 4)

HAZARD STATEMENT(S): WARNING: Harmful if swallowed

PRECAUTIONARY STATEMENT(S): Thoroughly wash after handling. Do not eat drink or smoke using this product. IF SWALLOWED: Call a Poison Center or doctor/physician if you feel unwell. Rinse mouth. Dispose of contents/container to an approved waste disposal plant.

SYMBOL: 

HAZARDS NOT OTHERWISE CLASSIFIED: N/A

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product Mixture

Synonyms: Mixture.
Molecular Weight: Not available
CAS-No.: Not available

<u>Ingredients:</u>	<u>Classification</u>	<u>CAS-No.</u>	<u>Concentration</u>
Ethylene Glycol	Acute Tox. 4	107-21-1	95%
Inhibitor solution (trade secret)	Not hazardous	n/a	5%

SECTION IV - FIRST AID MEASURES

EYES: If in eyes, rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

INGESTION: If swallowed, rinse mouth with water and consult a physician.

SKIN: If on skin, wash off with soap and water. Consult a physician.

INHALATION: If inhaled, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

ACUTE/DELAYED HEALTH HAZARDS: The most important known symptoms and effects are described in the labeling (see section II).

SECTION V - FIRE FIGHTING MEASURES

SUITABLE Extinguishing Media: Water spray, carbon dioxide, foam, dry chemical and any ABC class.

Unsuitable: N/A

Specific Hazards: This material may decompose and produce irritating vapors and toxic gases (e.g. carbon dioxides).

Advice for Firefighters: Incipient fire responders should wear eye protection. Structural fire fighters must wear Self-Contained Breathing Apparatus and full protective equipment. Move fire-exposed containers if it can be done without risk to firefighters. If possible, prevent run-off water from entering storm drains, bodies of water or other environmental areas.

SECTION VI - ACCIDENTAL RELEASE MEASURES

PERSONAL PROTECTIVE EQUIPMENT: Proper protective equipment should be used. In case of an uncontrolled release, clear the affected area, protect people and respond with trained personnel. Avoid breathing vapors. Ensure adequate ventilation.

ENVIRONMENTAL PRECAUTIONS: Do not let product enter drains.

METHODS/MATERIALS FOR CONTAINMENT AND CLEAN UP:

Small Spill: Cover with absorbent material (floor absorbent, vermiculite, etc.). Soak up spill and place material into a drum.

Large Spill: Wear protective equipment. Stop spill at source, dike the area surrounding the spill to prevent further exposure. Prevent material from entering sewer system. If necessary, absorbents such as vermiculite, clay floor absorbent may be used on spill and shoveled into drums.

WASTE DISPOSAL: For disposal see section 13.

SECTION VII - HANDLING AND STORAGE

GENERAL HYGIENE CONSIDERATIONS: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the day.

PRECAUTIONS FOR SAFE HANDLING: Use in a well ventilated location. Open drums and other containers of this product slowly, on a stable surface. Drums and other containers of this product should be properly labeled. Keep containers tightly closed.

CONDITIONS FOR SAFE STORAGE: Move drums of this product carefully, with the appropriate drum handling equipment. Store drums and other containers in cool, dry locations, away from direct sunlight, or sources of intense heat. Storage areas should be made of fire-resistant materials. Keep containers away from incompatible chemicals.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: None needed for normal circumstances of use. If needed, use only protection authorized in 29 CFR 1910.134, or applicable State regulations. Use supplied air respiration protection if oxygen levels are below 19.5% or are unknown.

EYE PROTECTION: Wear safety glasses with side shields.

SKIN PROTECTION: Wear butyl rubber, natural rubber, neoprene, Nitrile rubber or other suitable gloves for routine industrial use.

BODY PROTECTION: Wear impervious clothing.

OTHER PROTECTIVE EQUIPMENT: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work station locations.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

<u>PROPERTY</u>	<u>MEASUREMENT</u>	<u>PROPERTY</u>	<u>MEASUREMENT</u>
a) Appearance	Liquid	e) Vapor Pressure	0.05mm of Hg
b) Odor	Odorless	f) Vapor Density	2.1 (Air = 1)
c) pH	8 -10	g) Water Solubility	Soluble
d) Boiling Point	>100°C (>212°F)	h) Viscosity	>1.0 cP at 25°C (77°F)

SECTION X - STABILITY AND REACTIVITY

STABILITY: Stable

INCOMPATIBILITY: Slightly reactive to oxidizing agents, alkalis.

HAZARDOUS POLYMERIZATION: Not available.

SECTION XI - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

For Ethylene Glycol

LD50 Oral - rat: 4,700 mg/kg

LD50 Dermal - rabbit: 10,626 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Eyes - rabbit. Result: mild irritation 24h.

Irritancy of product

This product may cause irritation to contaminated tissues.

Reproductive toxicity

This product is not reported to produce mutagenic, embryotoxic or reproductive effects in humans.

Suspected cancer agent

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH, NTP or OSHA.

Medical conditions aggravated by exposure

It is anticipated that mainly skin, eye and respiratory disorders may be aggravated after over-exposure.

Additional information

When ingested, early symptoms mimic alcohol inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemic tetany and severe metabolic acidosis. Without treatment, death may occur in 8 to 24 hours. Victims who survive the initial toxicity period usually develop renal failure along with brain and liver damage. Exposure to and/or consumption of alcohol may increase toxic effects.

SECTION XII - ECOLOGICAL INFORMATION

ECOTOXICITY (AQUATIC AND TERRESTRIAL)

This product may be harmful to aquatic life if large quantities are released into bodies of water.

Ethylene Glycol Toxicity to Fish: NOEC-Pimephales promelas (fathead minnow)-39,140 mg/L, 96h.
NOEC-Pemephales promelas (fathead minnow)-32,000mg/L, 7d.
LC50-Oncorhynchus mykiss (rainbow trout)-18,500 mg/L, 96h.
LC50-Leuciscus idus (golden orfe)->10,000 mg/L, 48h.

Toxicity to Invertebrates: NOEC-Daphnia-24,000 mg/L, 48h.
EC50-Daphnia magna (water flea)-74,000 mg/L, 24h.
LC50-Daphnia magna (water flea)-41,000 mg/L, 48h.

PERSISTENCE AND DEGRADABILITY

Ratio BOD/ThBOD: 1.78%

BIOACCUMULATION POTENTIAL

Bioaccumulation, other fish-61d, 50 mg/L

MOBILITY IN SOIL

No data available

Other adverse effects

None

SECTION XIII - DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS:

Dispose of in accordance with all local, State and Federal regulations. Recycle if possible.



Ethylene Glycol

Effective 10/17/17

SECTION XIV - TRANSPORTATION INFORMATION

UN Number: 3082
DOT Proper Shipping Name: Cleaning Compound, liquid, N.O.S.

